## **LISTING OF THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

(Currently amended) An incoming message alarming system, comprising:
 a wireless communication system for receiving an incoming message from a
 calling mobile communication terminal and transmitting base alarm information including
 an identification of the calling mobile communication terminal; and

a messenger service system for receiving the base alarm information from the wireless communication system and informing a called subscriber of arrival of the incoming message through a messenger service sending incoming message alarming information indicating arrival of the incoming message to a personal computer on which a messenger service program being logged by a subscriber of a called mobile communication terminal is practiced.

- 2. (Currently amended) The incoming message alarming system of claim 1, wherein the wireless communication system comprises:
- a base station for receiving the incoming message from the calling mobile communication terminal;
- a mobile switching center for receiving the incoming message from the base station and transmitting the base alarm information to [[a]] the messenger service system; and

a home location register for storing location information of the called subscriber, subscriber information on whether or not the called subscriber is an incoming message alarming service subscriber, and flag information indicating an activation state of the incoming message alarming service, and wherein the messenger service system comprises:

a messenger server for receiving the base alarm information from the wireless communication system and transmitting incoming message alarming information indicating arrival of the incoming message to the called mobile communication terminal; and

Serial No. 10/788,429 Art Unit 2687

a messenger information database for storing an internet protocol (IP) address and a messenger identification (ID) of the called subscriber,

wherein the messenger server informs the called subscriber of the incoming message's arrival by using the IP address.

- 3. (Cancelled).
- 4. (Currently amended) The incoming message alarming system of claim [[2]] 23, wherein the messenger server asks the called subscriber whether to use the incoming message service and stores resultant information on whether to use the incoming message service [[("]] as use information [[")]] in the messenger information database.
- 5. (Original) The incoming message alarming system of claim 4, wherein the flag information is updated by the use information.
- 6. (Original) The incoming message alarming system of claim 5, wherein the messenger server transmits the incoming message alarming information to the called subscriber, with reference to the flag information, when the incoming message alarming service has been activated.
- 7. (Original) The incoming message alarming system of claim 5, wherein the messenger server temporarily stores the incoming message alarming information, with reference to the flag information, when the incoming message alarming service has not been activated.

Serial No. 10/788,429 Art Unit 2687

8. (Currently amended) A wireless communication system, comprising: a base station for receiving an incoming message from a calling mobile communication terminal; and

a mobile switching center for receiving the incoming message from the base station and transmitting base alarm information to a messenger service system, wherein the messenger service system receives the base alarm information, and then sends incoming message alarming information indicating arrival of the incoming message to a personal computer on which a messenger service program being logged by a subscriber of a called mobile communication terminal is practiced.

- 9. (Original) The wireless communication system of claim 8, wherein the base alarm information is at least one of identifications of a calling mobile communication terminal sending the incoming message and the called mobile communication terminal, if the incoming message is a call, and is at least one of identifications of a calling mobile communication terminal and the called mobile communication terminal, and the content of a short message, if the incoming message is the short message.
- 10. (Original) The wireless communication system of claim 8, wherein the mobile switching center temporarily stores the base alarm information when the base alarm information is not able to be transmitted to the messenger service system.

(Currently amended) A messenger service system, comprising:
a messenger information database for storing an IP address and a messenger ID
of a called subscriber;

a messenger server for sending incoming message alarming information to a personal computer on which a messenger service program being logged by the called subscriber is on practicing according to the IP address, wherein the incoming message alarming information indicates arrival of an incoming message transmitted from a wireless communication system, and wherein the wireless communication system comprises a base station for receiving the incoming message from a calling mobile communication terminal; and

a mobile switching center for receiving the incoming message from the base station and transmitting the base alarm information to the messenger service system transmitting to a called mobile communication terminal incoming message alarming information indicating arrival of an incoming message transmitted from a calling mobile communication terminal; and

a messenger information database for storing an IP address and a messenger ID of the called subscriber,

wherein the messenger server informs the called subscriber of the incoming message's arrival by using the IP address.

- 12. (Currently amended) The messenger service system of claim 11, wherein the messenger server transmits sends the incoming message alarming information through internet to the called subscriber who has logged in a messenger service personal computer.
- 13. (Currently amended) The messenger service system of claim 11, wherein the messenger server temporarily stores the incoming message alarming information when the incoming message alarming information is not able to be transmitted sent to the called subscriber.

14. (Original) The messenger service system of claim 11, wherein the incoming message alarming information is at least one of an identification of a calling mobile communication terminal sending the incoming message and information indicating the incoming message's arrival, if the incoming message is a call, and is at least one of an identification of the calling mobile communication terminal and the content of a short message, if the incoming message is the short message.

15 through 17. (Cancelled).

18. (Currently amended) A method for alarming an incoming message of a mobile communication terminal, comprising:

transmitting base alarm information including an identification of a called mobile communication terminal by a wireless communication system;

receiving the base alarm information and searching an IP address corresponding to the identification of the called mobile communication terminal <u>by a messenger service</u> system; and

alarming arrival of the incoming message to a called subscriber by using the searched IP address through personal computer on which a messenger service program being logged by a subscriber of a called mobile communication terminal is practicing, by the messenger service system.

19. (Original) The method of claim 18, wherein said transmitting base alarm information comprises:

receiving an incoming message from a calling mobile communication terminal; checking whether or not the called subscriber is an incoming message alarming service subscriber;

if the called subscriber is an incoming message alarming service subscriber, checking whether or not the incoming message alarming service has been activated; and

if the incoming message alarming service has been activated, transmitting the base alarm information.

20. (Currently amended) The method of claim 18, wherein said alarming arrival of the incoming message to a called subscriber comprises:

checking whether or not the called subscriber has logged in the messenger service <u>program</u>;

if the called subscriber has logged in the messenger service <u>program</u>, checking whether or not the called subscriber wants to use the <u>an</u> incoming message alarming service;

if the called subscriber wants to use the incoming message alarming service, transmitting the incoming message alarming information to [[a]] the personal computer which the called subscriber has logged in; and

creating an incoming message alarming window indicating the incoming message's arrival.

21. (Original) The method of claim 19, wherein said transmitting base alarm information further comprises:

if the incoming message alarming service has not been activated, temporarily storing the base alarm information until the incoming message alarming service is activated; and

when the incoming message alarming service is activated, transmitting the base alarm information.

22. (Currently amended) The method of claim 20, wherein said alarming arrival of the incoming message to a called subscriber the personal computer further comprises:

if the incoming message alarming service has not been activated, temporarily storing the incoming message alarming information until the incoming message alarming service is activated; and

when the incoming message alarming service is activated, transmitting the incoming message alarming information to the personal computer.

Serial No. 10/788,429 Art Unit 2687

23. (New) The incoming message alarming system of claim 1, wherein the messenger service system comprises:

a messenger information database for storing an IP address and a messenger ID of the called subscriber; and

a messenger server for receiving the base alarm information from the wireless communication system and sending the incoming message alarming information to the personal computer according to the IP address.

24. (New) The messenger service system of claim 11, wherein the messenger information database is located in the messenger server.